



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/528,393

03/18/2005

Masanori Ogawa

2710/74074

4392

7590
Donald S Dowden
Cooper & Dunham
1185 Avenue of the Americas
New York, NY 10036

03/25/2008

EXAMINER

NICHOLS, CHRISTOPHER S

ART UNIT

PAPER NUMBER

4191

MAIL DATE

DELIVERY MODE

03/25/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/528,393	Applicant(s) OGAWA ET AL.	
	Examiner CHRISTOPHER S. NICHOLS	Art Unit 4191	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

METHOD FOR PRODUCING RESIN MASKING MATERIAL

Claim Objections

1. Claim 2 is objected to because of the following informalities: "Claim" is misspelled as "Calim". Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the part" in line 3 of claim 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "thermoplastic resin mold" in line 3 of claim 1. There is insufficient antecedent basis for this limitation in the claim. It is unclear whether the mold is made of thermoplastic resin or the mold is used to mold a masking member made of thermoplastic resin. For purposes of compact prosecution, the limitation is considered to mean the mold is used to mold a masking member made of thermoplastic resin.

Claim 1 recites the limitation "said area" in line 4 of claim 1. There is insufficient antecedent basis for this limitation in the claim. It is unclear which area the applicant means.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al. (EP 1110619 A1) in view of Asano et al. (US 2001/0018622).

Regarding claim 1, Ogawa et al. teach manufacturing a masking member by vacuum forming a sheet of plastic film in a mold of a desirable shape (see Paragraph [0086]) and subsequently trimming the masking member (see Paragraph [0090]). Ogawa et al. are silent regarding the use of CAD data to prepare the mold used to form the masking member. Asano et al. teach using a CAD system to design a mold based on data stored in a computer (see Paragraph [0075]; see also Paragraph [0004]-[0006]; see also Fig. 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a CAD system to design the mold in the manufacturing method by Ogawa et al., because Asano et al. teach using a CAD system to design a mold rapidly determines a mold parting line with accuracy (see Paragraph [0023]).

Regarding claim 2, Ogawa et al. teach molding the masking member by vacuum forming and/or pressure forming (hot pressing) a thermoplastic resin sheet (see Paragraph [0086]).

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al. and Asano et al. as applied to claims 1-2 above, and further in view of Irie (JP 10-29081).

Regarding claim 3, Ogawa et al. and Asano et al. teach every claimed limitation except trimming the masking member by a robot operated using CAD data. Irie teaches an automated trimming method that uses a laser guided by data from a CAD system (see Abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use an automated trimming system guided by CAD data to trim the masking member in the manufacturing method by Ogawa et al. and Asano et al., because Irie teaches that automated trimming using CAD data reduces man hour required in a production process (see Abstract).

7. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al. and Asano et al. as applied to claims 1-2 above, Irie as applied to claim 3 above, and further in view of Horiki et al. (US 5,266,375).

Regarding claim 4, the combination of Ogawa et al., Asano et al., and Irie teach every claimed limitation. However, none of the aforementioned references specifically disclose fixing the masking member to a jig having a corresponding shape of the masking member prior to trimming. It is obvious that an article should be fixed, i.e. not move, when the article is being cut because moving the article would make the cutting extremely inaccurate. In addition, Horiki et al. teach fixing the masking member (see Fig. 4 at 110A) on a jig (see Fig. 4 at 114A) having a surface shape corresponding to the masking member (see Fig. 4 generally). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to fix the masking member to a jig having a corresponding shape of the masking member prior to trimming the masking member in the manufacturing method by Ogawa et al., Asano et al. and Irie, because Horiki et al. teach fixing the masking member to a jig having a corresponding shape

of the masking member (no cap between masking member and base) prior to trimming improves workability in the trimming process (see column 3 line 18-26).

Regarding claims 5-7, Ogawa et al., Asano et al, Irie, and Horiki et al. do not specifically disclose fixing the masking member to the jig by vacuum suction, by magnetic force, or adhesive tape. However, the aforementioned methods are well known to apply enough pressure and/or force to prevent the movement of an article as evidenced by Askjer (US 4,083,527; see column 1 line 64-68). Therefore, it would have been obvious to one of ordinary skill in the art to fix the masking member to the jig by vacuum suction, by magnetic force, or adhesive tape, because the aforementioned methods are well known to apply enough pressure and/or force to prevent the movement of an article and still allowing the article to be easily detached.

8. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al. and Asano et al. as applied to claims 1-2 above, and further in view of Busky et al. (US 5,134,911).

Regarding claims 8-9, Ogawa et al. and Asano et al. teach every claimed limitation except trimming the masking member using (1) an ultrasonic vibration knife or (2) a water jet cutter. Busky et al. teach an automated method for cutting sheet material using an ultrasonically vibrated knife or a water jet (see column 3 line 15-27). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use (1) an ultrasonic vibration knife or (2) a water jet cutter to trim the masking member in the manufacturing method by Ogawa et al. and Asano et al., because Busky et al. teach that the aforementioned trimming techniques can

me automatically moved by a computer using CAD data, i.e. computer implemented control system (see column 3 line 21-28).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher S. Nichols whose telephone number is (571) 270-3969. The examiner can normally be reached on Monday thru Thursday 7:30 AM to 5:00 PM EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dah-Wei Yuan can be reached on (571) 272-1295. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/Christopher S. Nichols/
Examiner, Art Unit 4191**

/Dah-Wei D. Yuan/

Application/Control Number: 10/528,393

Art Unit: 4191

Page 7

Examiner: Nichols

Supervisory Patent Examiner, Art Unit 4191